

REMARKS OF FCC CHAIRMAN TOM WHEELER  
AS PREPARED FOR DELIVERY  
'EMBRACING CHANGE FOR PUBLIC SAFETY COMMUNICATIONS'  
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Thank you, APCO, and welcome to Washington.

I always knew public safety professionals were bold, but traveling to DC in August to get work done is one of the most audacious things I've ever heard of.

It was only a few years ago that foreign governments quit paying tropical duty bonuses for being stationed in Washington for the summer.

Kidding aside, you can still get work done in the dog days of a DC summer.

I'm speaking from first-hand experience.

Earlier this month, the Commission passed rules to enhance the continuity of 911 communications by requiring providers of fiber-based home voice services to provide consumers with information about how their service could go down in a power outage, and give consumers the option to buy backup power.

And last August we adopted rules to ensure that mobile providers enable the delivery of texts to 911.

Public safety doesn't take a break for the summer, and neither do we.

I mention these decisions, not only because of APCO's obvious interest in 911, but because they highlight the broader themes I want to discuss today.

To say this is a time a great technological change is to engage in understatement. You all know this – you do courageous work on the front lines every day responding to emergencies.

These technology changes are creating new opportunities to enhance public safety.

Modern networks enable first responders to receive a broader range of information – such as text and video – to enhance their efforts during an emergency.

At the same time, the march of technological progress raises new challenges.

How we responded to the fact that fiber-based home voice services are more vulnerable to outages than their copper predecessors should be a marker for how we at the FCC intend to proceed.

APCO has been an important FCC partner during this time of change.

APCO was party to the 2012 commitment between public safety and the wireless industry that formed the basis for our text-to-911 rules.

And earlier this year, APCO, working in close partnership with NENA and the wireless industry, was instrumental to the Commission's adoption of new rules strengthening our wireless 911 location accuracy requirements.

Today, I'd like to talk about what we – and, by we, I mean those of us at the FCC and those of you who make up APCO – need to do to continue to seize the opportunities and tackle the challenges created by new technology.

At the FCC, we have made adapting to this new reality – and helping both consumers and the public safety community adapt – a top priority.

This month's backup power rules are just the latest example that the Commission is taking action.

Last fall, we proposed a 911 governance structure to ensure that there are no gaps between local, state, and federal authority as the technologies and vendors that comprise our public safety networks change.

Everybody that is part of the 911 call completion process – from the ILECs to the software vendors – needs to bear their fair share of the responsibility to make sure that the most important call any of us will ever make goes through.

As I mentioned earlier, at the beginning of 2015 we strengthened our wireless 911 location accuracy rules.

To be clear, we established a floor for location accuracy...not a ceiling. Commercial location-based services like Uber can find users with pinpoint accuracy.

Wireless 911 location accuracy needs to be just as reliable.

This March, we proposed updates to our Network Outage Reporting System – or NORS – to reflect changes in technology and consumer usage.

For example, we propose new metrics for wireless network performance.

NORS is a critical tool in the FCC's toolbox to help preserve and improve the reliability of our nation's communications networks.

For it to be effective, it needs to reflect the realities of today's – and tomorrow's – networks. Stay tuned for additional action on that front in the coming months.

We also have made it clear that we will not tolerate egregious 911 failures.

The switch to digital networks has changed the nature of providing 911 services – that is good, but it cannot result in outages caused by growing pains.

In the last 4 months, we have issued almost \$40 million in penalties for outages that left millions of consumers unable to reach 911 for hours at a time.

I cannot imagine a more harrowing experience than desperately needing to call 911 because a loved one needs medical attention, only to pick up the phone and hear...nothing. We won't stand for it.

Those are some of the notable actions we've already taken, but if we limit ourselves to merely adapting the status quo to reflect technological change, we will have sold America short.

The American public has every right to expect us to fully leverage new technology to *improve* public safety. So let's fast forward, and talk about some of the things we are working on now and will take up in the near future.

One area where we can leverage new technology to improve public safety outcomes is spectrum. Spectrum is a vital national resource.

Congress has made clear that it expects greater spectrum efficiency from all spectrum users – that means taking advantage of new technologies that enable greater spectrum sharing.

These technologies are already being used in the commercial bands.

For the public safety community, this is a tremendous opportunity to take advantage of new capabilities to deliver substantial and meaningful benefits to all of our communities.

Working together, we should embrace this opportunity to enable you to serve your communities even more efficiently and effectively.

The main topic I want to emphasize today, though, is NG911.

Done right, the move to Next Generation 911 should dramatically improve emergency response.

Some state and local 911 decision-makers have made important strides to migrate their PSAPs to NG911.

This is gratifying to see.

APCO has contributed greatly by helping state and local public safety leaders better understand NG911 technology and best practices for implementation.

But I think everyone would agree we are not where we need to be.

To date, the transition to NG911 has been too slow and too ragged, increasing overall cost and risk of failure, while leaving us well short of our goals of improving emergency response and saving lives.

There are understandable reasons that the move to NG911 has lagged.

I understand, for example, how state and local authorities must maintain legacy communications capabilities during a transitional period.

Maintaining two infrastructures increases cost and complexity at a time when our public safety resources are already stretched razor thin.

But this isn't a unique experience; throughout our communications infrastructure, this is being done – and done successfully.

Let me be clear: just because the slow implementation of Next-Generation 911 is understandable doesn't make it excusable.

Today's fractured implementation of 911 and NG911 capabilities leaves Americans confused and at greater risk. Lives are at stake.

We have to do better.

So what's the answer?

For our part, the FCC has formed an expert advisory panel to grapple with this question.

Our Task Force on Optimal Public Safety Answering Point Architecture has set its sights on addressing how PSAPs can best integrate NG911 functionality into their operations.

At its most recent meeting, just a few weeks ago, the Task Force provided interim reports indicating good progress made by its working groups on NG911 architectures, allocation of resources, and cybersecurity.

Later this year, we will see the final reports and a unified set of recommendations from the Task Force.

While these recommendations will provide a valuable roadmap to help accelerate and coordinate the transition to NG911, we all need to get on that road with speed and purpose.

I can assure you that, on our end, we will use the Task Force recommendations to be instrumental in shaping the Commission's strategy for encouraging and incentivizing NG 911 implementation.

But the fact remains that the FCC can only do so much to help you tackle the NG911 transition.

While Congress has enacted important 911 legislation over the last 20 years, the legislative framework largely adopted in 1999 has been outstripped by changes in technology, the marketplace, and consumer behavior in the 21<sup>st</sup> century.

To effectively implement NG911, we need to amend our laws in a way that reflects the changing realities on the ground.

Over the coming months, I want to work with Congress to do just that.

This is an important conversation to have, and the FCC can play a helpful role by bringing the right people together, such as through public workshops.

Let me start that conversation right now with a few ideas – some of which are new, and some of which you may recognize.

First, state and local 911 authorities need the best possible tools to do the job. We at the Commission will do our part, but an effective and efficient NG911 can only become a reality if our state and local partners are empowered to act on the vision we all share.

For example, the maps our PSAPs use to identify where callers are calling from should not end at the county or state line.

We have all heard of the tragedy in Georgia where a woman trapped in a sinking car drowned because her mobile signal was picked up by an antenna in an adjoining PSAP's territory, and that PSAP was unable to locate her.

Congress could authorize establishment of a national maps database to ensure that every PSAP has access to the latest and most accurate maps and uses them. As maps increasingly include the third dimension, approaching this issue in a consistent, effective and efficient manner will be money well spent.

We understand how everything costs money.

Every year, the FCC publishes a report on how 911 fees are being used, and every year we find that some jurisdictions are not allocating these fees to improving public safety in their communities. None of us should find that acceptable.

"You get what you pay for" should go double when it comes to public safety.

Shining a spotlight on the problem is a start, but we need to be able to do more. For example, Congress could direct the FCC to assist states in developing effective audit tools to ensure appropriate collection and expenditure of 911 funds and prevent diversion of funds to other purposes.

Bottom line: localities need to have access to appropriate resources to ensure that 911 services meet the needs of their communities, and funding collected for 911 should only be used for 911.

More broadly, additional federal grants to states could help pay for the capital costs of implementing NG911.

Congress provided \$115 million in grant funding as part of the Next Generation 911 Advancement Act of 2012.

That's a good start, but more can be done. Congress could authorize matching funds to help PSAPs migrate to efficient NG911 ESI-Nets and shared platforms.

It could condition existing and future grants on the use of best practice architectures identified by our Task Force's recommendations for optimal NG911 implementation.

Finally, PSAPs are being thrust into the same cyber fight that has proven so challenging to both government and commercial organizations, but without the necessary tools.

The simple truth is that PSAPs – particularly smaller PSAPs – are not well resourced to address this fight and in many cases cannot afford to face it alone.

One way to help PSAPs protect themselves against cyberattack would be for Congress to incent the development and use of shared Security Operations Centers supporting multiple PSAPs.

We need to think creatively about coordinating our cyber defenses to leverage expertise as broadly as possible so that all our PSAPs have access to tools to protect themselves.

The fact that public safety is now competing in the cybersecurity space is just one indicator of the changing talent needs of emergency response workforce.

We need to prepare for these changes, and we need to do this together.

I want to commend the work that APCO, NENA and others in the public safety community are doing for the future public safety workforce.

It is absolutely vital to the continued reliability of our public safety networks.

The changing demands of the public safety workforce must be reflected in our recruitment and training programs.

Even more, we should coordinate with our universities and community colleges to make sure our higher education system is helping to develop the public safety workforce of tomorrow.

I want to encourage public safety communicators and the officials that support them to commit to continuous learning.

If we don't, we will be exposed to risk we don't understand and for which we are not ready.

As we talk about transforming 911 and emergency response, I'm reminded of a joke by prominent Silicon Valley executive, Aaron Levie.

He recently quipped that a common attitude toward change for CEOs and government officials is: "I'm pro innovation. As long as everything stays EXACTLY the same."

Technology is changing our world, and those of us charged with promoting and protecting public safety need to change with it.

The disruption will be difficult and the temptation to stick with the status quo will be great.

But embracing next-generation technologies will be worth it.

I know the leadership of APCO understands this.

And I know you all see it every day you show up to work.

We look forward to working with you to seize the opportunities before us and realizing the promise of modern communications to improve public safety.

Thank you.